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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,922	09/26/2003	Alex Ezra Cable	9314.0027	9462

22852 7590 01/23/2008
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

LUONG, VINH

ART UNIT	PAPER NUMBER
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3682

MAIL DATE	DELIVERY MODE
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01/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/672,922	Applicant(s) CABLE ET AL.	
	Examiner Vinh T. Luong	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-31,33-71 and 74-76 is/are pending in the application.
- 4a) Of the above claim(s) 21,24,38,44-71 and 74-76 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 28 is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9-27,29-31,33-37 and 39-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/8/07;9/25/07;4/2/07;1/18/07; 9/26/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received


Vinh T. Luong
Primary Examiner

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/25/07</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Attachment</u> . |

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1. The amendment filed on November 8, 2007 has been entered.
2. Claims 21, 24, 38, 44-71, and 74-76 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention and/or species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on April 2, 2007.

Applicant admitted that the motor in Claims 21, 24, 38, and 44 is shown as the tool driver 702 in FIG. 6. See page 22 of the above amendment. However, FIG. 6 is not an elected species as seen in the response to the restriction requirement filed on April 2, 2007. Therefore, Claims 21, 24, 38, and 44 are withdrawn as being drawn to the nonelected species.

3. This application contains Claims 21, 24, 38, 44-71, and 74-76 drawn to an invention or species nonelected with traverse in the reply filed on April 2, 2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144). See MPEP § 821.01.

4. The drawings were received on November 8, 2007. These drawings are unacceptable by the Examiner because of the reasons, *inter alia*, listed below:

(a) These drawings are inconsistent with the specification. See 37 CFR 1.121(e). For example, paragraph [017] of the amended specification describes line A-A in FIG. 1B, however, FIG. 1B show line 1A-1A instead of A-A; and

(b) These drawings are inconsistent with Applicant's remarks in the amendment. For example, Applicant stated that "FIG. 1G shows that the first threaded surface 410 and the second threaded surface 420 are *both* external threaded surfaces." However, FIG. 1G filed on April 2, 2007 and September 25, 2007 were not accepted by the Examiner. Thus, FIG. 1G has not been

entered. See page 3 of the Office action on June 25, 2007 and Notice of Noncompliance Amendment on October 16, 2007. Therefore, the examination is still based on the original drawings. Since FIG. 1G was not shown in the replacement drawings filed on November 8, 2007 and on the filing date, thus, Applicant's remarks are inconsistent with the replacement drawings filed on November 8, 2007 and on the filing date. Applicant is respectfully suggested to submit all of the figures even if only one figure is being amended to avoid possible confusion and mistake during examination, issue, and printing processes through out the prosecution.

5. The drawings are objected to because the drawings are not in compliance with 37 CFR 1.84 and 1.121(d). See prior Office actions and Forms PTO-948 attached therein.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. *The objection to the drawings will not be held in abeyance.*

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6. The amendment filed on November 8, 2007 is objected to under 37 CFR 1.121(e) because, e.g., the specification is inconsistent with the drawings. For example, paragraph [017] of the amended specification describes line A-A in FIG. 1B, however, amended FIG. 1B show line 1A-1A instead of A-A. Appropriate correction is required.

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-3, 5-7, 9-20, 22, 23, 25-27, 29-31, 33-37, and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cable (US Patent No. 6,186,016 B1).

Regarding Claim 1, Cable teaches a differential adjuster, comprising: an intermediate actuator sleeve 3 with a first threaded surface 24 *operatively* engaging a housing 1 to adjust the position of the intermediate actuator sleeve 3, a second threaded surface 35 *operatively* engaging a push rod 5 to adjust the position of the intermediate actuator sleeve 3 relative to the push rod 5, and a tool interface (at 48 in FIG. 1, see Attachment hereinafter "Att.").

Applicant's claim recites "*operatively* engaging." It is well settled that the general descriptive term "*operatively*" means only that components must be engaged in a manner to perform designated function. It broadly includes both physical (direct) and nonphysical (indirect) engaging. *Innova/Pure Water Inc. v. Safari Water Filtration Systems Inc.*, 72 USPQ2d 1001 (Fed. Cir. 2004).

In summary, Cable teaches the invention substantially as claimed. However, Cable does not explicitly teach the first threaded surface containing threads that are a different pitch than the second threaded surface.

It is common knowledge in the art to form Cable's first threaded surface containing threads that are a different pitch than Cable's second threaded surface in order to provide very fine and/or precise adjustments as evidenced by Applicant's description in paragraph [0004] of the specification.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form Cable's first threaded surface containing threads that are a different pitch than Cable's second threaded surface in order to provide very fine and/or precise adjustments as taught or suggested by common knowledge in the art.

Regarding Claim 2, the push rod 5 moving rate is inherently related to the difference in pitch between the first threaded surface 24 and the second threaded surface 35 when the intermediate actuator sleeve 3 is rotated relative to the housing 1. Cable, col. 2, line 6+. Moreover, referring the differential adjuster to the merely inferentially included element or intended use element, such as, the tool that engages the tool interface of the intermediate actuator sleeve is not accorded patentable weight. It is well settled that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then, it meets the claim.

Regarding Claim 3, the housing 1 and the push rod 5 are arranged so that the push rod 5 is capable of being rotationally constrained with respect to the housing 1. See FIGS. 2 and 3.

Regarding Claim 5, the first threaded surface 24 is an external threaded surface and the second threaded surface 35 is an internal threaded surface. See FIG. 1.

Regarding Claim 6, Cable teaches the first threaded surface 24 being external threaded surface. Further, Cable's second threaded surface 35 is equivalent to the external threaded surface 26. See MPEP 2144.06.

Regarding Claim 7, Cable's first threaded surface 24 is equivalent to the internal threaded surface 25 (FIG. 2) and Cable's second threaded surface 35 is equivalent to the external threaded surface 26. See MPEP 2144.06 *supra*.

Regarding Claim 9, the housing 1 is a main body.

Regarding Claim 10, to choose the dimension of the main body 1 to be less than 1 inch in length would have been a matter of choice in design since the claimed structures and the function they perform are the same as the prior art. *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995) citing *In re Gal*, 980 F.2d 717, 719, 25 USPQ2d 1076, 1078 (Fed. Cir. 1992). See also legal precedent regarding changes in size/proportion in MPEP 2144.04.

Regarding Claim 11, the main body 1 includes a main body tool interface 10 for allowing a second tool 2 to rotate the main body 1.

Regarding Claim 12, the main body 1 includes a threaded surface 10 (col. 1, line 51+).

Regarding Claim 13, the main body 1 is capable of engaging a mount threaded surface in a component mount 2. *Ibid.* col. 1, line 51+.

Regarding Claim 14, the main body threaded surface 10 is capable of providing a coarse adjustment. *Ibid.* col. 1, line 65+.

Regarding Claim 15, see regarding Claim 10 above.

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Regarding Claim 16, to choose the dimension of the main body to be less than 0.25 inch in diameter would have been a matter of choice in design since the claimed structures and the function they perform are the same as the prior art. *In re Chu, supra*.

Regarding Claim 17, see a knob 4 *operatively* coupled to the main body 1 to provide a coarse adjustment, the knob 4 defining an opening (Att.) allowing access to the tool interface.

Regarding Claim 18, the main body 1 includes a coarse tool interface 10 to affect the coarse adjustment. *Ibid.* col. 1, line 65+.

Regarding Claims 19 and 22, the coarse tool interface 10 accommodates a coarse adjustment tool, the coarse adjustment tool 22 chosen from the group consisting of a spanner wrench, a socket, a screw driver, a ball driver, and an Allen wrench. By comparison, Cable's tool 22 is similar to Applicant's tool 800 illustrated in Applicant's FIG. 6. Therefore, Cable's tool 22 "reads on" the claimed tool from the Markush group in the claim in view of Applicant's lack of showing of the screwdriver, ball driver, Allen wrench, etc.

Regarding Claims 20 and 23, the coarse adjustment tool includes a knob or a handle 22.

Regarding Claim 25, the housing 1 is a component mount or positioner that engages the first threaded surface 24 of the intermediate actuator sleeve 3 (FIGS. 2 and 3).

Regarding Claim 26, the push rod 5 includes a ball bearing 32.

Regarding Claim 27, Cable teaches a differential adjuster, comprising:

an intermediate actuator sleeve 3 including a first threaded surface 24 and a second threaded surface 35;

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a main body 1 engaged with the first threaded surface 24 of the intermediate actuator sleeve 3 to adjust the position of the main body 1 relative to the intermediate actuator sleeve 3, the main body 1 including a threaded surface 10 to provide a coarse adjustment; and

a push-rod 5 engaged with the second threaded surface 35 of the intermediate actuator sleeve 3 to adjust the position of the push-rod 5 relative to the intermediate actuator sleeve 3 and operatively coupled to the main body 1 to restrict the relative rotational motion between the push-rod 5 and the main body 1, wherein

the main body includes a coarse tool interface 10, 12.

It is common knowledge in the art to form Cable's first threaded surface containing threads that are a different pitch than Cable's second threaded surface in order to provide very fine and/or precise adjustments as evidenced by Applicant's description in paragraph [0004] of the specification.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form Cable's first threaded surface containing threads that are a different pitch than Cable's second threaded surface in order to provide very fine and/or precise adjustments as taught or suggested by common knowledge in the art.

Regarding Claims 29-31, and 33-37, see regarding Claims 5-7, 10, 16, 13, 19, and 20.

Regarding Claim 39, the intermediate actuator sleeve 3 is coupled to a knob 4 to affect a differential adjustment.

Regarding Claim 40, the coarse tool interface accommodates a spanner wrench 18, 22.

Regarding Claim 41, the intermediate actuator sleeve 3 includes a tool interface (at 48 in FIG. 1, see Att.).

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Regarding Claim 42, the tool interface (Att.) of the intermediate actuator sleeve 3 is capable of accommodating an adjustment tool, the adjustment tool chosen from the group consisting of a spanner wrench, a socket, a screw driver, a ball driver, and an Allen wrench. Moreover, note that referring the differential adjuster to the merely inferentially included element or intended use element, such as, the tool that engages the tool interface of the intermediate actuator sleeve is not accorded patentable weight.

Regarding Claim 43, the differential adjustment tool includes a knob or a handle 22.

9. Claims 4 and 28 are allowed.
10. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).
11. Applicant's arguments filed November 8, 2007 have been fully considered but they are not persuasive.

DRAWINGS

The replacement drawings have been disapproved for the reasons set forth above.

ABSTRACT & SPECIFICATION

The previous objections to the abstract and specification are withdrawn in view of the amendments.

35 USC 112

The previous rejections under 35 USC 112 are withdrawn in view of the amendments and remarks thereof.

35 USC 103

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Applicant contended:

The amended claim 1 recites an intermediate actuator sleeve with a first threaded surface *operatively engaging* a housing to adjust the position of the intermediate actuator sleeve relative to the housing, a second threaded surface *operatively engaging* a push rod to adjust the position of the intermediate actuator sleeve relative to the push rod, and a tool interface. In the Office Action, *the Examiner equates the threaded surface 24 in Cable to the first threaded surface as recited in claim 1*. However, in Cable, as shown in FIGS. 1-3, *the threaded surface 24 is used to secure the main body 3 into the body 1*. This feature can be further seen from the specification, which describes that "a main body 3 is threaded into body 1 at 24, 25 to form the main structure of the adjuster." *See col. 2, lines 6-7*. Thus, the main body 3 is fixed to the body 1 at the threaded surfaces 24, 25. *Cable does not teach or suggest using the threaded surface 24 to operatively engage a housing to "adjust the position of the intermediate actuator sleeve relative to the housing."* Thus, the main body 3 in Cable is different from the intermediate actuator sleeve as recited in claim 1. (Emphasis added).

The Examiner respectfully submits during patent examination, the pending claims must be given their *broadest reasonable interpretation consistent with the specification*, however, it is impermissible to import the subject matter from the specification into the claims. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1320 (Fed. Cir. 2005) *en banc* and MPEP 2111.

Applicant's contentions are not based on the limitations appearing in the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. *See In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993) and *Phillips, supra*. In fact, Applicant's Claim 1 broadly recites "operatively engaging," *a fortiori*, the claim does not preclude the non-physical/indirect engagement of the claimed sleeve with the housing.

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In the instant case, when one adjusts the position of Cable's knob 4, one simultaneously adjusts the position of the drive screw/push rod 5. On the one hand, the drive screw 5 is threaded into the body 3, thus, the body 3 is adjusted therewith. On the other hand, the body 3 is fixed to the housing 1 by the threaded surfaces 24 and 25 as Applicant noted. The position of the body 3 relative to the housing 1 is adjustable by screwing or unscrewing the body 3 from the housing 1 via the threads 24, 25. Therefore, the body 3 "reads on" Applicant's intermediate sleeve.

With respect to Claim 27, Applicant contended that the relative rotation between Cable's drive screw 5 and body 1 is not restricted as required by Claim 27.

The Applicant respectfully submits that common knowledge based on standard physics text books teaches that the relative rotation between Cable's push rod 5 and body 1 is inherently restricted by the frictional force resulting from the motions of the ball detent 40, spring 6, and tapered pin 6, *etc.* as seen in FIG. 2.

In addition, the clause "to restrict the relative rotational motion between the push-rod and the main body" in Claim 27 merely states the inherent results of limitations in the claim, thus, it adds nothing to the claim's patentability or substance. This clause is similar to the "whereby" or "wherein" clause in *Texas Instruments Inc. v. International Trade Commission*, 26 USPQ2d 1018 (Fed. Cir. 1993); *Griffin v. Bertina*, 62 USPQ2d 1431 (Fed. Cir. 2002); and *Amazon.com Inc. v. Barnesandnoble.com Inc.*, 57 USPQ2d 1747 (Fed. Cir. 2001).

For the foregoing, the rejections of Claims 1 and 27 are respectfully maintained.

12. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinh T. Luong whose telephone number is 571-272-7109. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

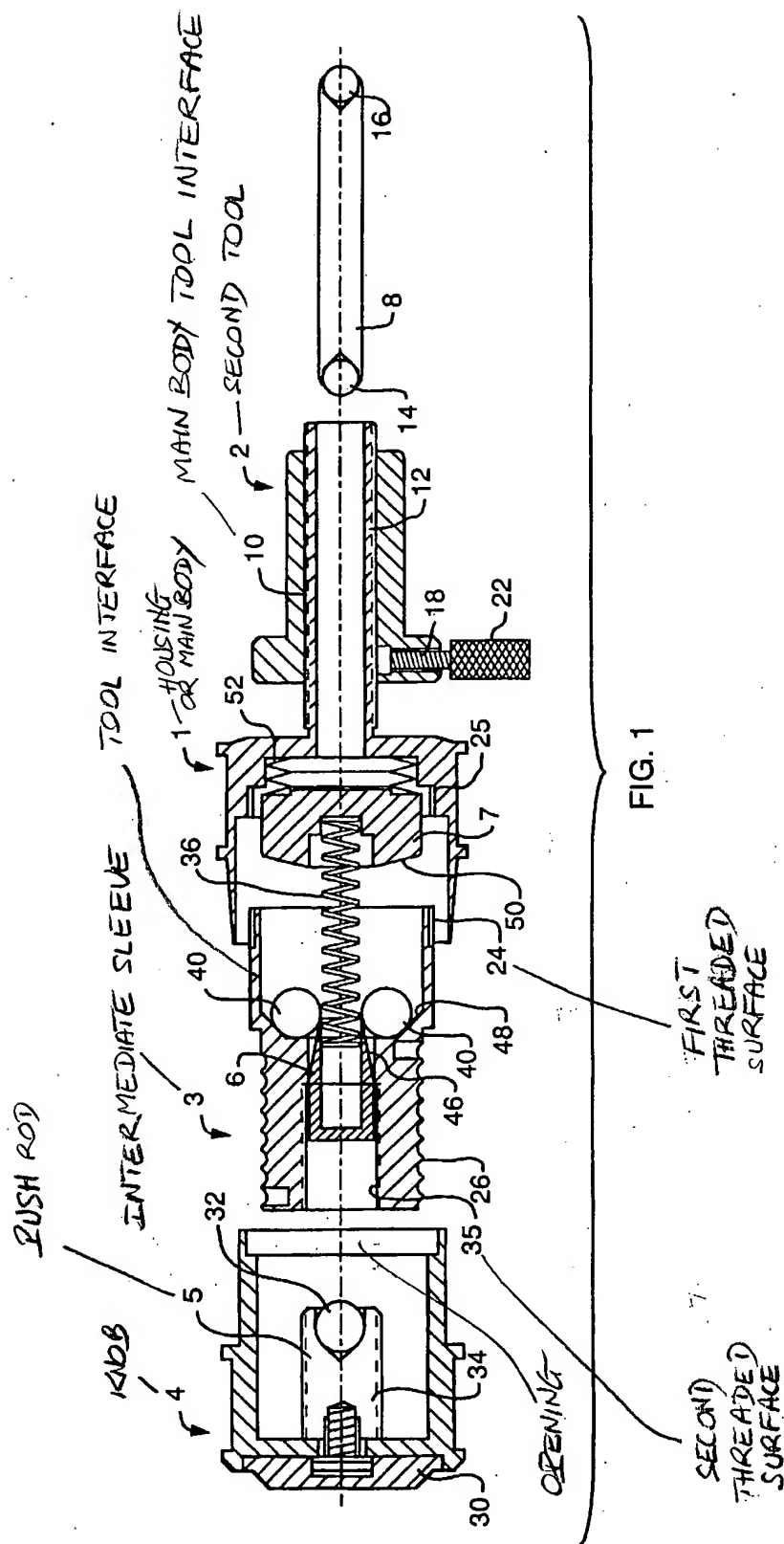
Luong

January 22, 2008



Vinh T. Luong
Primary Examiner

ATTACHMENT



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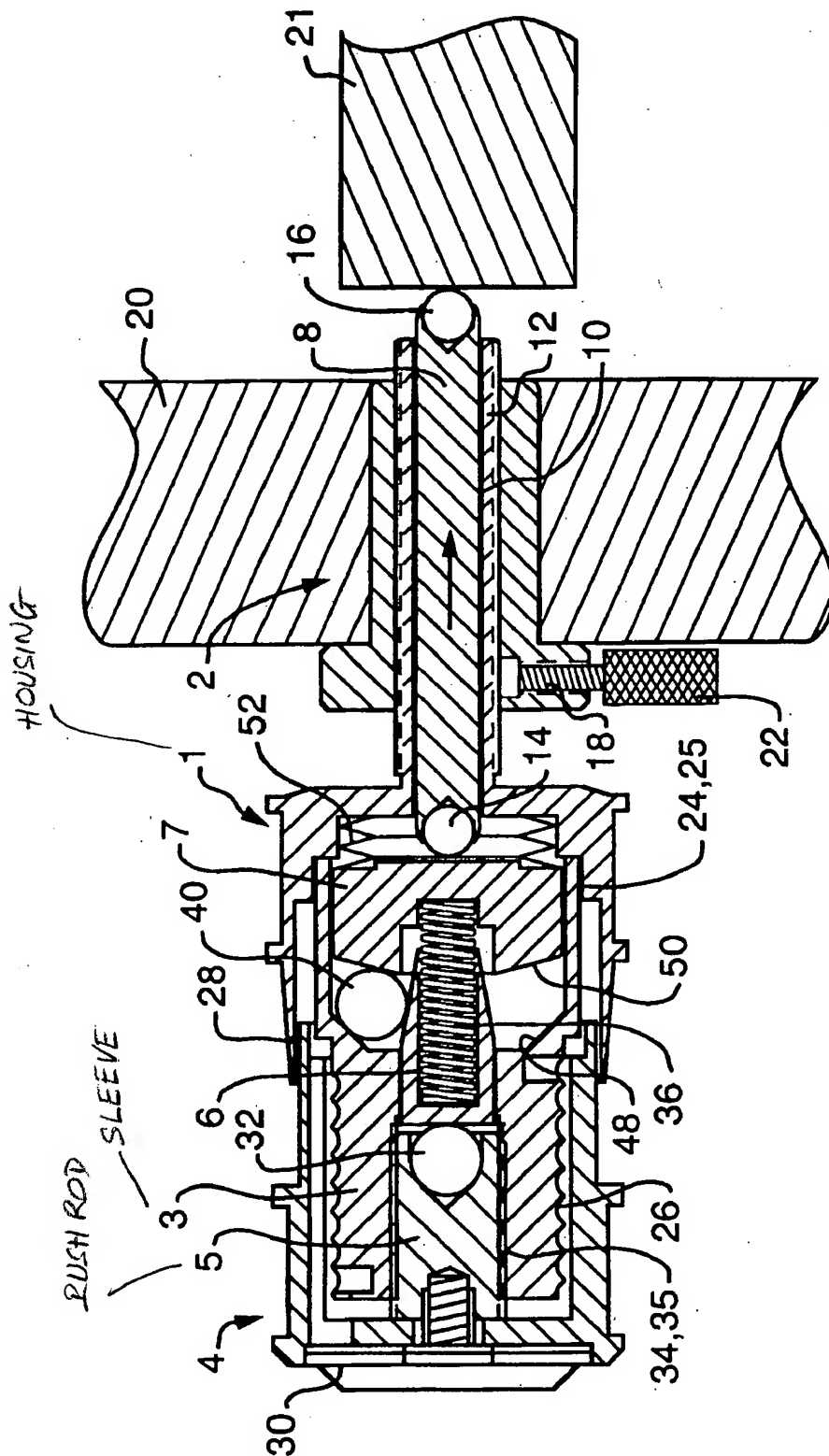


FIG. 2

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